

PRIOR ART

FIG. 1

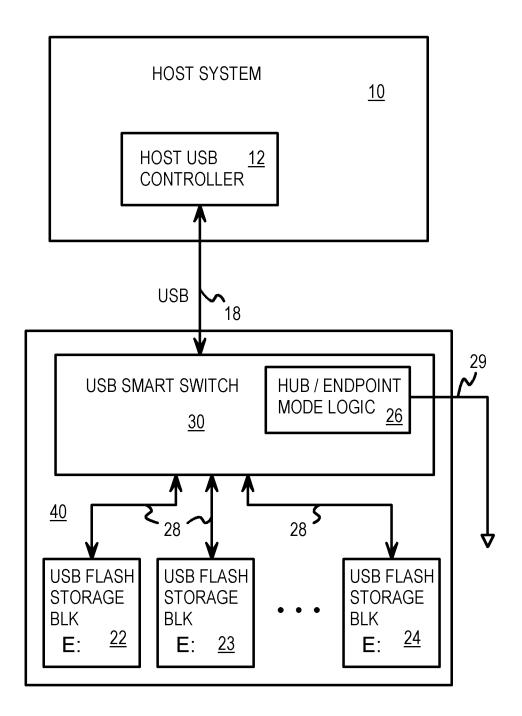


FIG. 2

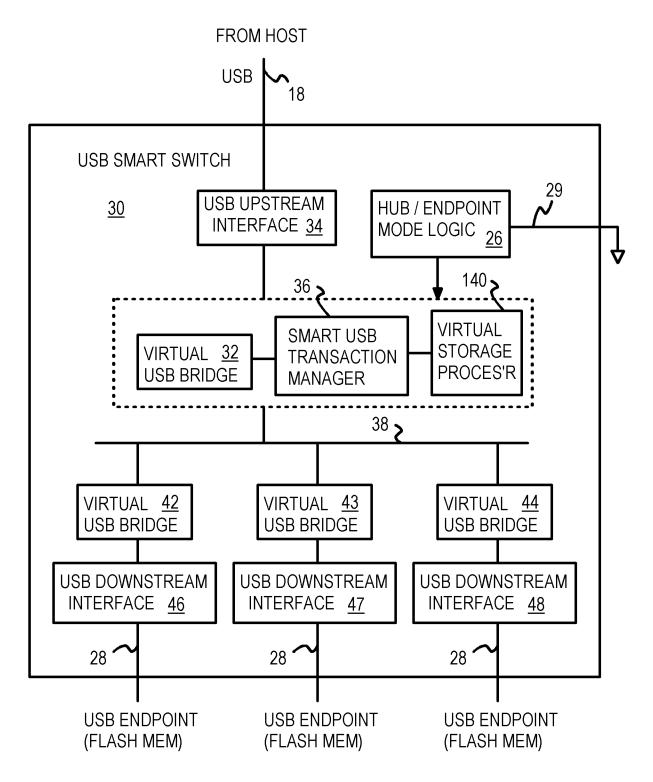
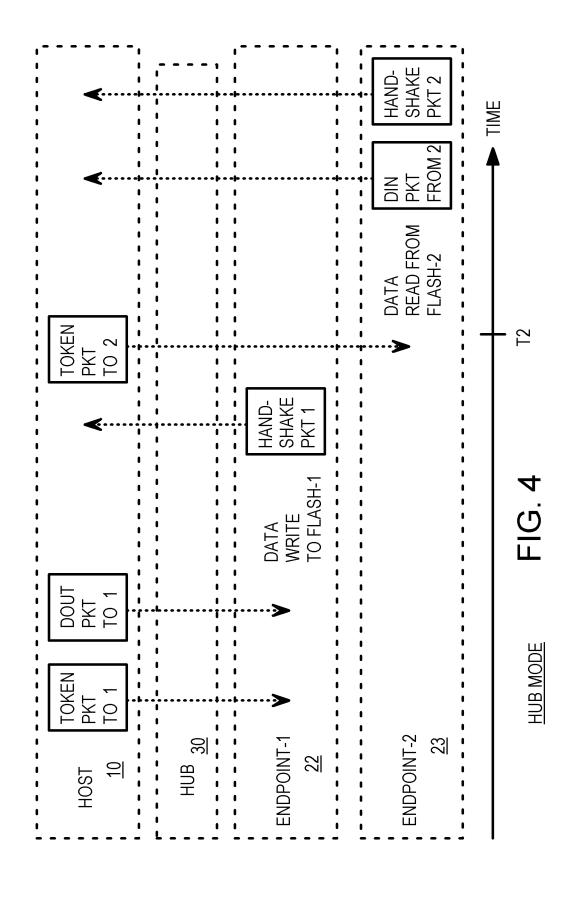
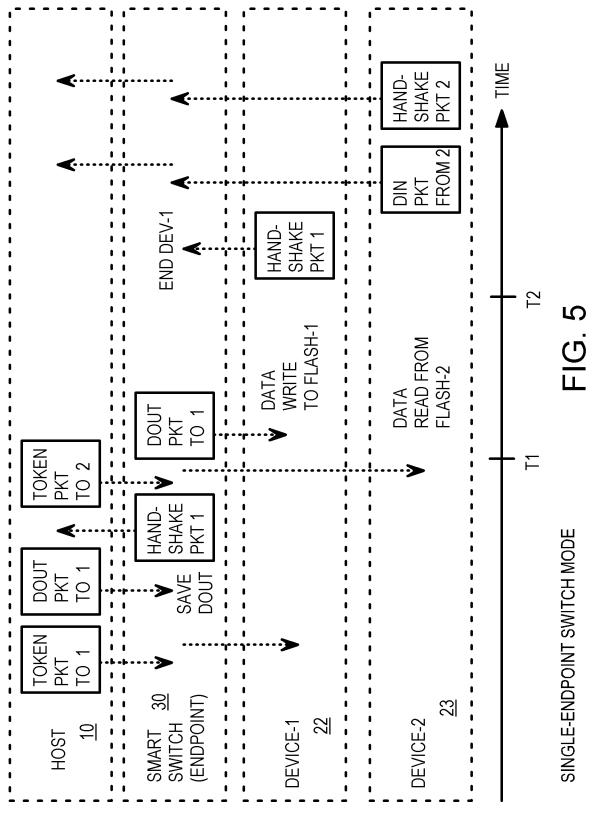


FIG. 3





| | | | | | TIME |
|----------|---|-------|------------|--|----------|
| | HAND- SHAKE PKT 2 | | | HAND- SHAKE PKT 2 | Î |
| | TOKEN DIN HAND- PKT PKT SHAKE TO 2 FROM 2 PKT 2 | | | DIN HAND- PKT SHAKE FROM 2 PKT 2 | |
| | TOKEN PKT TO 2 | ••••• | | HAND- SHAKE PKT 1 | |
| | HAND- SHAKE PKT 1 | | | DOUT PKT TO 1 | |
| | DOUT PKT TO 1 | ***. | · | TOKEN PKT TO 2 | |
| | TOKEN PKT TO 1 | | | TOKEN TOKEN PKT PKT TO 1 TO 2 | |
| UPSTRFAM | QUEUE TO & FROM | I SOH | DOWNSTREAM | QUEUE FROM SMART SWITCH | TO FLASH |

SINGLE-ENDPOINT SWITCH MODE

FIG. 6

| 1ST TRAN | RD SE(| G A N | RD SE M | GB N | WR SE | C G A N | WR SE M | | |
|----------|-----------|----------|---------------|---------|----------|---------------|---------------|---|---|
| RD | ADR: M | Χ | R | R | R | Χ | R | R | R |
| SEG A | ADR: N | R | Χ | R | R | R | Χ | R | R |
| RD | ADR: M | R | R | Χ | R | R | R | Χ | R |
| SEG B | ADR: N | R | R | R | Χ | R | R | R | Χ |
| WR | ADR: M | Х | R | R | R | Χ | R | R | R |
| SEG A | ADR: N | R | Χ | R | R | R | Χ | R | R |
| WR | ADR: M | R | R | Χ | R | R | R | Χ | R |
| SEG B | ADR: N | R | R | R | Χ | R | R | R | Χ |

R = RE-ORDER TOKEN PACKETS

X = DON'T RE-ORDER TOKEN PACKETS

FIG. 7

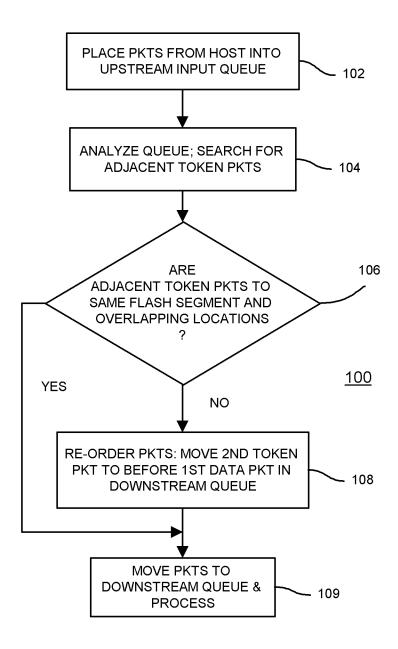
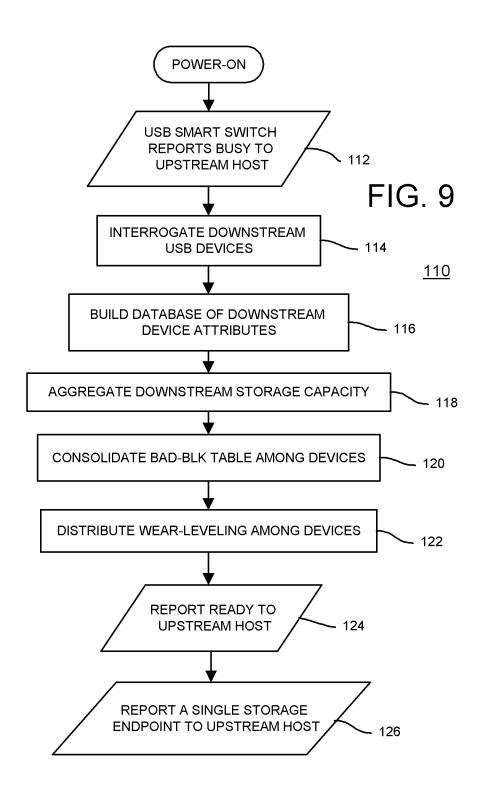
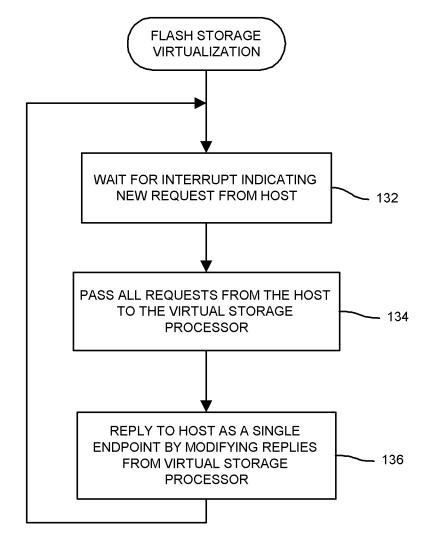


FIG. 8





<u>130</u>

FIG. 10

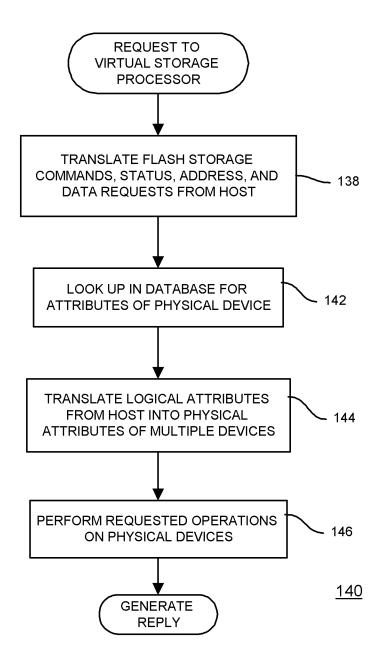
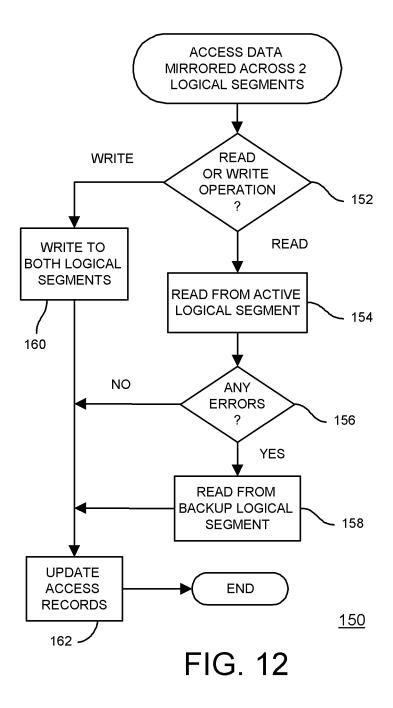


FIG. 11



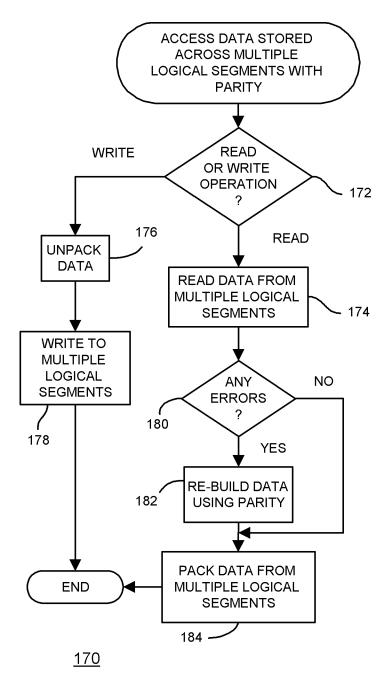


FIG. 13

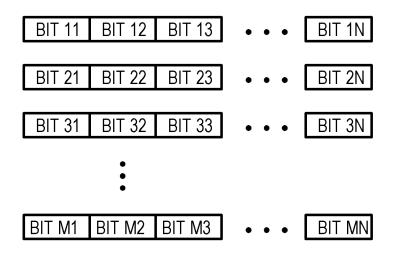


FIG. 14A

```
FLASH MEM
                BIT 11
                         BIT 12
                                 BIT 13
                                                   BIT 1N
SEGMENT 1
FLASH MEM
                         BIT 22
                                 BIT 23
                BIT 21
                                                   BIT 2N
SEGMENT 2
FLASH MEM
                BIT 31
                         BIT 32
                                                   BIT 3N
                                 BIT 33
SEGMENT 3
FLASH MEM
                        BIT M2
                                BIT M3
                BIT M1
                                                   BIT MN
SEGMENT M
```

FIG. 14B

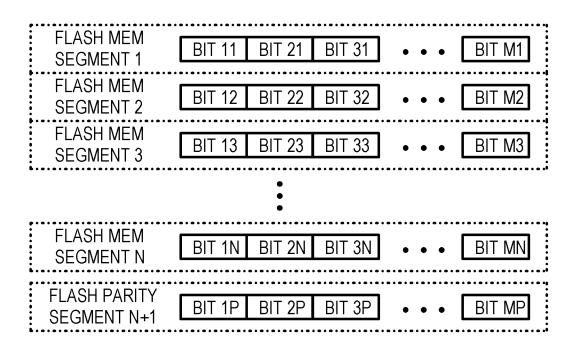


FIG. 14C